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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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John Spinks

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EXAMINER

PHILLIPS, HASSAN A

ART UNIT

PAPER NUMBER

2151

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/764,543	<b>Applicant(s)</b> SPINKS ET AL.	
	<b>Examiner</b> HASSAN PHILLIPS	<b>Art Unit</b> 2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-9 and 28-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-9 and 28-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is in response to communications filed March 20, 2008.

#### ***Claim Objections***

2. In response to the cancellation of claim 19, examiner has withdrawn the objection to claim 19.

3. Claim 31 is objected to because of the following informalities: the claim currently depends on cancelled claim 19. Examiner believes the claim should depend on new claim 30, and has interpreted the claim as so in order to advance prosecution. Appropriate correction is required.

#### ***Response to Arguments***

4. Applicant's arguments filed March 20, 2008 have been fully considered but they are not persuasive. Applicant argued: it is improper to combine references where the references teach away from their combination; and the Office Action's rejection is based on impermissible hindsight. Examiner respectfully disagrees with these assertions.

5. In response to applicant's argument that it is improper to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as indicated in the previous action, examiner maintains it was well known in the art for a computer network like the one taught by Nakamura to comprise network devices like switches, routers and hubs so as to allow communication among other network devices. Thus, it would have been obvious to one of ordinary skill in the art to modify the teachings of Nakamura to expressly disclose the network device being selected from the group consisting of a switch, router, and hub. This would have advantageously provided a device map solely designated to switches, routers and hubs, (see Nakamura, col. 20, lines 15-18). Such a map would have advantageously indicated to a user the location of all devices that allow communication among other network devices and end station devices, (see Nakamura, Fig. 32, AAPA, pg. 1, lines 23-26).

6. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a

reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

7. Applicant's remaining arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 3-9, 28, 30, are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura, U.S. Patent 6,721,818, in view of Franke et al. (hereinafter Franke), U.S. Patent 6,507,869, and further in view of Applicants Admitted Prior Art (AAPA).

10. In considering claim 1, Nakamura teaches an apparatus for physical detection and tracking of devices on a computer network, the apparatus comprising: a processor (2806), for executing executable data structures, (col. 19, lines 28, 29, Fig. 28); and a memory device (2807) operably connected to the processor for storing the executable data structures and associated operational data structures (col. 19, lines 29-33, Fig. 28),

the executable and operational data structures comprising: a reporting module (i.e. read transaction process) configured to query a network infrastructure device (i.e. 101) and obtain end point connection information corresponding to a first network device (i.e. 101, 110, 111, 112, etc.), the network infrastructure device automatically updating a connection table (see Fig. 31) mapping ports (i.e. outlets 101) thereof to node identifications (i.e. NODE ID 0, 1, 2, etc.), the end point connection information comprising information (i.e. room index A1, B1, B2 etc.) from the connection table identifying a port (i.e. outlet 101) through which the first network device connects to the network device, (col. 19, lines 52-col. 20, line 14, also see col. 17, line 62-col. 18, line 4, and col. 18, line 39-45 and Fig.'s 1, 24-26, and 31); and a correlation module (i.e. device map preparation application) configured to associate the end point connection information corresponding to the first network device to a location identifier (i.e. Room A, Room B, etc.) corresponding to a physical location, (col. 20, lines 15-18, and Fig. 32).

Although the teachings of Nakamura disclose substantial features of applicant's claimed invention, they fail to expressly disclose: the network infrastructure device storing the connection table.

Nevertheless, in analogous teachings, Franke discloses a network infrastructure device (800) storing and automatically updating a connection table mapping ports thereof (i.e. ports 804) to node identifications (i.e. host IP addresses), (see col. 4, lines 31-42).

Thus, given the teachings of Franke, it would have been obvious to one of ordinary skill in the art to modify the teachings of Nakamura to expressly disclose the

network infrastructure device storing the connection table. This would have advantageously allowed for dynamically and uniquely identifying the physical location of equipment attached to the network infrastructure device by sending queries directly to the network infrastructure device, (Franke, col. 4, lines 43-61).

Although the teachings of Nakamura disclose substantial features of applicant's claimed invention, they fail to expressly disclose: the network infrastructure device being selected from the group consisting of a switch, router, and hub.

Nevertheless, it was well known in the art for a computer network like the one taught by Nakamura to comprise network infrastructure devices like switches, routers and hubs so as to allow communication among other network devices. Applicant acknowledges this in the disclosure, (see AAPA, pg. 1, lines 23-26).

Thus, it would have been obvious to one of ordinary skill in the art to modify the teachings of Nakamura to expressly disclose the network infrastructure device being selected from the group consisting of a switch, router, and hub. This would have advantageously provided a device map that includes switches, routers and hubs, (Nakamura, col. 20, lines 15-18). Such a map would have advantageously indicated to a user the location of all devices that allow communication among other network devices and end station devices, (Nakamura, Fig. 32, AAPA, pg. 1, lines 23-26).

11. In considering claim 3, Nakamura teaches the reporting module comprising a communication module configured to transmit the end point connection information to a central database. See col. 17, lines 11-32.

12. In considering claim 4, Nakamura teaches the reporting module further comprising an update module configured to detect a change of end point connection information corresponding to the first network device. See col. 9, lines 57- 67, col. 10, lines 1-2.

13. In considering claim 5, Nakamura teaches the reporting module further comprising an inventory module configured to detect a second network device local to the first network device and obtain end point information corresponding to the second network device. See col. 10, lines 51-53 and col. 19, lines 52-65.

14. In considering claim 6, it is inherent that the apparatus and article of manufacture taught by Nakamura comprises a monitoring module configured to receive end point connection information from the reporting module. See col. 9, lines 57-67, col. 10, lines 1-2 and col. 19, lines 37, 38.

15. In considering claim 7, Nakamura teaches the correlation module further comprising a device recognition module configured to identify the nomenclature of the first network device based on product recognition records. See col. 19, lines 66- 67, col. 20, lines 1-14.



16. In considering claim 8 and 9, Nakamura suggests the inventory module is configured to detect and transmit software and hardware configuration information corresponding to a first or second network device. See col. 19, lines 52-55, and col. 20, lines 5-14.

17. In considering claim 28, Nakamura teaches an article of manufacture comprising a computer-readable medium storing data structures for programming a computer, the data structures comprising: a reporting module (i.e. read transaction process) configured to query a device (i.e. 101) automatically updating a connection table (see Fig. 31) mapping each port (i.e. outlet) of the device to each node (i.e. 101, 110, 111, 112, etc.) connected to the device, and retrieving from the connection table a port identification (i.e. room index A1, B1, B2 etc.) corresponding to a particular node (i.e. NODE ID 0, 1, 2, etc.), (col. 19, lines 52-col. 20, line 14, also see col. 17, line 62-col. 18, line 4, and col. 18, line 39-45 and Fig.'s 1, 24-26, and 31); and a correlation module (i.e. device map preparation application) configured to receive the port identification and identify an area within a building (i.e. Room A, Room B, etc.) in which an electronic device corresponding to the particular node is located, (col. 20, lines 15-18, and Fig. 32).

Although the teachings of Nakamura disclose substantial features of applicant's claimed invention, they fail to expressly disclose: the network device storing the connection table.

Nevertheless, in analogous teachings, Franke discloses a network infrastructure device (800) storing and automatically updating a connection table mapping ports thereof (i.e. ports 804) to node identifications (i.e. host IP addresses), (see col. 4, lines 31-42).

Thus, given the teachings of Franke, it would have been obvious to one of ordinary skill in the art to modify the teachings of Nakamura to expressly disclose the network device storing the connection table. This would have advantageously allowed for dynamically and uniquely identifying the physical location of equipment attached to the network device by sending queries directly to the network device, (Franke, col. 4, lines 43-61).

Although the teachings of Nakamura disclose substantial features of applicant's claimed invention, they fail to expressly disclose: the network device being selected from the group consisting of a switch, router, and hub.

Nevertheless, it was well known in the art for a computer network like the one taught by Nakamura to comprise network devices like switches, routers and hubs so as to allow communication among other network devices. Applicant acknowledges this in the disclosure, (see AAPA, pg. 1, lines 23-26).

Thus, it would have been obvious to one of ordinary skill in the art to modify the teachings of Nakamura to expressly disclose the network device being selected from the group consisting of a switch, router, and hub. This would have advantageously provided a device map that includes switches, routers and hubs, (Nakamura, col. 20, lines 15-18). Such a map would have advantageously indicated to a user the location of

all devices that allow communication among other network devices and end station devices, (Nakamura, Fig. 32, AAPA, pg. 1, lines 23-26).

18. In considering claim 30, Nakamura teaches a method for physical detection and tracking of devices (i.e. 101, 110, 111, 112, etc.) on a computer network, the method comprising: identifying a functioning computer network housed within a building and comprising a plurality of devices (i.e. 101, 110, 111, 112, etc.), a first device (i.e. 101) of the plurality of devices being an outlet, the first device automatically updating a connection table (see Fig. 31) mapping each port thereof to each node (i.e. 110, 111, 112, etc.) connected thereto, (col. 19, lines 52-col. 20, line 14, also see col. 17, line 62-col. 18, line 4, and col. 18, line 39-45 and Fig.'s 1, 24-26, and 31); installing and running, after the identifying, reporting software on a second device (i.e. 112, 113, 114, etc.) of the plurality of devices, (col. 18, lines 39-52); installing and running, after the identifying, correlating software on a third device (i.e. 112) of the plurality of devices, the correlating software comprising a binding table (see Fig. 31) mapping ports (i.e. outlets 101) of the first device to areas (i.e. Rooms) within the building corresponding thereto, (col. 20, lines 15-18, also see Fig. 32); directing, by the reporting software, the second device to query the first device and obtain for the connection table a port identification corresponding to the second device, (col. 19, lines 52-col. 20, line 14, also see col. 17, line 62-col. 18, line 4, and col. 18, line 39-45 and Fig.'s 1, 24-26, and 31); directing, by the reporting software, the second device to report the port identification to the third device, (col. 19, lines 3-11); and directing, by the correlating software, the third device to

determine the location of the second device by locating the port identification within the binding table and retrieving information designating an area within the building mapped thereto, (col. 19, line 65-col. 20, line 23, also see Fig. 32).

Although the teachings of Nakamura disclose substantial features of applicant's claimed invention, they fail to expressly disclose: the first device storing the connection table.

Nevertheless, in analogous teachings, Franke discloses a network infrastructure device (800) storing and automatically updating a connection table mapping ports thereof (i.e. ports 804) to node identifications (i.e. host IP addresses), (see col. 4, lines 31-42).

Thus, given the teachings of Franke, it would have been obvious to one of ordinary skill in the art to modify the teachings of Nakamura to expressly disclose the first device storing the connection table. This would have advantageously allowed for dynamically and uniquely identifying the physical location of equipment attached to the first device by sending queries directly to the first device, (Franke, col. 4, lines 43-61).

Although the teachings of Nakamura disclose substantial features of applicant's claimed invention, they fail to expressly disclose: the first device being selected from the group consisting of a switch, router, and hub.

Nevertheless, it was well known in the art for a computer network like the one taught by Nakamura to comprise network devices like switches, routers and hubs so as to allow communication among other network devices. Applicant acknowledges this in the disclosure, (see AAPA, pg. 1, lines 23-26).

Thus, it would have been obvious to one of ordinary skill in the art to modify the teachings of Nakamura to expressly disclose the first device being selected from the group consisting of a switch, router, and hub. This would have advantageously provided a device map that includes switches, routers and hubs, (Nakamura, col. 20, lines 15-18). Such a map would have advantageously indicated to a user the location of all devices that allow communication among other network devices and end station devices, (Nakamura, Fig. 32, AAPA, pg. 1, lines 23-26).

19. Claims 29, 31, are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura in view of Franke in view of AAPA, and further in view of Babu et al. (hereinafter Babu), U.S. Patent 6,122,639.

20. In considering claims 29 and 31, although the teachings of Nakamura disclose substantial features of applicant's claimed invention, they fail to expressly disclose: the query comprises use of Simple Network Management Protocol (SNMP).

Nevertheless, use of SNMP was well known in the art at the time of the invention. This is evidenced in analogous teachings where in describing the background of the invention, Babu discloses use of SNMP in a computer network including devices such as switches and routers.

Thus, given the teachings of Babu, it would have been obvious to one of ordinary skill in the art to modify the teachings of Nakamura to expressly disclose the query comprises use of SNMP. As was known in the art, this would have advantageously

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allowed for communications amongst network devices according to an agreed-upon protocol, (Babu, col. 1, lines 24-26).

### ***Conclusion***

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HASSAN PHILLIPS whose telephone number is (571)272-3940. The examiner can normally be reached on Mon-Fri (8am-5pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hassan Phillips  
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/John Follansbee/  
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